

DART SERVICE INSTRUCTION

**TO AMEND IIN-D350-822 REV. I OR LATER APPROVED REVISION
AND ICA-D350-822 REV. 7 OR LATER APPROVED REVISION**

REF. TCCA STC: SH14-14
REF. ANAC STC: 2014S07-11
REF. FAA STC: SR03538NY
REF. JCAB STC: STC-371-OSA/STC-372-OSA
REF. EASA STC: 10056574
REF. RUSSIA STC: FATA-STC03012

1.0 INTRODUCTION

It has come to Dart's attention that some customers are experiencing difficulty transitioning the AS350B3e (Arriel 2D engine only) Vehicle and Engine Management Display (VEMD) to Antisand Filter Mounted (ASF-M) configuration for the PA100 PUREair System installation as required per Section 3.1 of IIN-D350-822 Rev. I.

2.0 PURPOSE

The purpose of this Dart Service Instruction (DSI) is to provide additional details to assist in transitioning the AS350B3e VEMD to ASF-M configuration as required per Section 3.1 of IIN-D350-822 Rev. I.

3.0 PROCEDURE

In order to take advantage of the preprogrammed AS350B3e VEMD ASF-M configuration, the VEMD requires ground connections to be installed per DART drawing D350-822-901 Rev. B or later approved revision. Once the connectors are installed, the VEMD can be powered and the installer can enter the VEMD Maintenance Page EECU Data screen to confirm the installation. The following describes this procedure in detail.

3.1 Obtain access to the aircraft VEMD and its connectors (reference Aircraft Maintenance Manual for instructions).

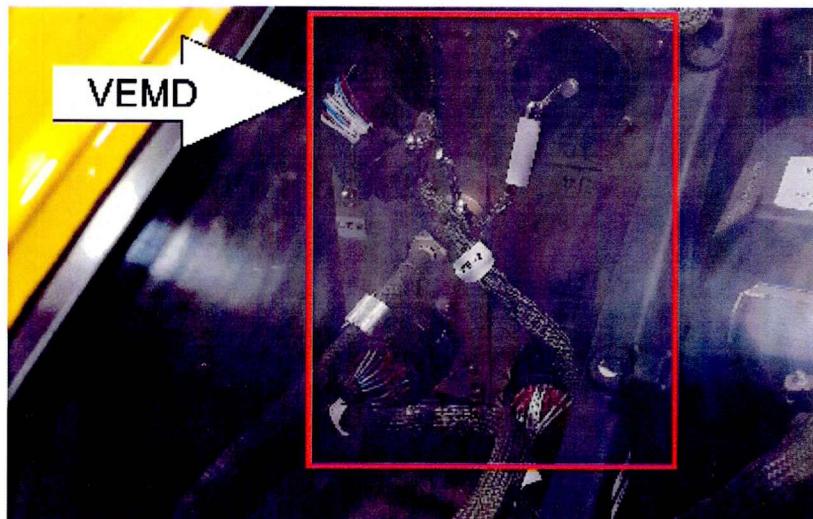
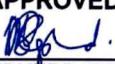


FIGURE 1: VEMD as viewed through the front windshield of AS350B3e aircraft

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED  BY: _____ D. SHEPHERD (DE # 02)	
DATE:	20.05.13
CERT. NO.:	SH14-14
ISSUE NO.:	2

APPROVED

C	ADD ITEM 3.11			SAD	20.05.13
B	INSERT STEP 3.4 ; REF CAR19-300			PM	19.03.14
A	NEW ISSUE			WK	18.10.18
REV.	DESCRIPTION			BY	DATE
DESIGN	WK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN	SAD				
CHECKED	MB	DRAWING NO.			REV. C
MFG. APPR.	N/A	DSI 9808			SHEET 1 OF 5
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DE APPR.	DS	PA100 VEMD CONFIG			NTS
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3.2 Determine aircraft MOD status (reference aircraft "INDIVIDUAL INSPECTION LOG BOOK / MODIFICATIONS EMBODIED IN THE HELICOPTER). Presence of the modification number indicates that the modification has been completed on the aircraft.

AIRBUS HELICOPTERS		REGISTRE INDIVIDUEL DE CONTROLE INDIVIDUAL INSPECTION LOG BOOK				Vérsion Page					
APPAREIL AIRCRAFT AS 350 B3 N° SÉRIE XXXXX		MODIFICATIONS APPLIQUÉES A L'HELICOPTÈRE MODIFICATIONS EMBODIED IN THE HELICOPTER				1/16					
MODIFICATIONS APPLIQUÉES A L'HELICOPTÈRE MODIFICATIONS EMBODIED IN THE HELICOPTER AS 350 B3											
AIRBUS HELICOPTERS		REGISTRE INDIVIDUEL DE CONTROLE INDIVIDUAL INSPECTION LOG BOOK				Vérsion Page					
APPAREIL AIRCRAFT AS 350 B3 N° SÉRIE XXXXX		MODIFICATIONS APPLIQUÉES A L'HELICOPTÈRE MODIFICATIONS EMBODIED IN THE HELICOPTER				1/16					
MODIFICATION	N° ETAT STATE #*	DM LC	P P	MODIFICATION	N° ETAT STATE #*	DM LC	P P	MODIFICATION	N° ETAT STATE #*	DM LC	P P
071480	0			074255	0			074257	0		
071499	0			074268	0			074272	0		
073564	0			074297	0			074274	0		
071162	0			074244	0			074277	0		
071365	0			074212	0			074269	0		
071425	0			074213	0			074261	0		
073496	0			074215	0			074282	0		
073764	0			074247	0			074254	0		
073767	0			074231	0			074260	0		
073727	0			074203	0			074295	0		
073740	1			074229	0			074292	0		
073760	0			074235	0			074294	0		
073766	0			074239	0			074259	0		
073808	0			074241	0			074300	0		
073812	0			074242	0			074302	0		
073820	0			074243	0			074304	0		
073822	0			074247	0			074311	0		
073824	0			074249	0			074317	0		
076205	0			074252	0			074318	0		
Visa des Services Qualité Quality Department's Signature											

FIGURE 2: Aircraft MOD Status

3.3 Obtain aircraft VEMD part number (found on sticker on the side of the VEMD, eg: B35000FB01).

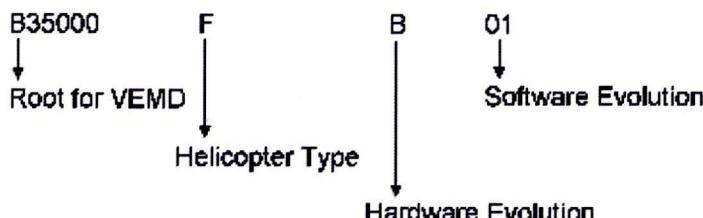


FIGURE 3: VEMD P/N Definition

3.4 Verify VEMD part number software evolution matches the expected maintenance page data screen, either "EECU DATA" or "FADEC DATA", as shown in Figure 7. If any discrepancies are found in Step 3.1 - 3.4, contact DART Technical Support:

Dart Aerospace
1270 Aberdeen Street
Hawkesbury, Ontario, Canada
K6A 1K7
Tel: 613-676-0992
Email: support@dartaero.com

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DESIGN DRAWN	WK SAD	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED	MB	DRAWING NO.	REV. C	
MFG. APPR.	N/A	DSI 9808	SHEET 2 OF 5	
APPROVED	VS	TITLE	SCALE	
DE APPR.	DS- <u>H</u>	PA100 VEMD CONFIG	NTS	
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3.5 Using the VEMD part number and MOD status, determine the applicable wiring configuration from DART drawing D350-822-901 Rev. B or later approved revision.

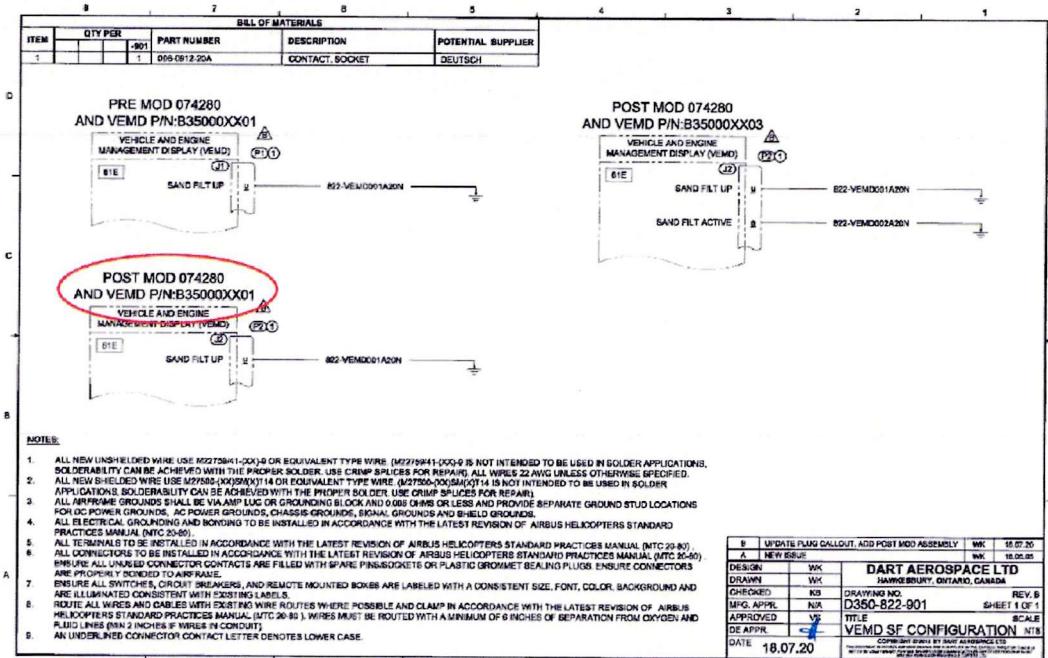


FIGURE 4: DART drawing D350-822-901
(example configuration for B35000XX01 post MOD 074280 shown)

3.6 Locate the applicable VEMD jack and plug per the configurations shown in drawing D350-822-901 Rev. B or later approved revision.

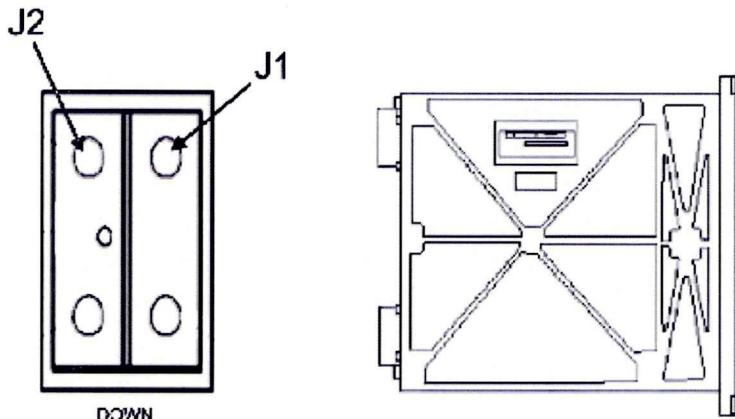


FIGURE 5: VEMD Mechanical Interface

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CHECKED	MB	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9808	SHEET 3 OF 5
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3.7 Locate the applicable pin location on the Jack, per DART drawing D350-822-901 Rev. B or later approved revision, and install the applicable wire into the corresponding pin location on the Plug.

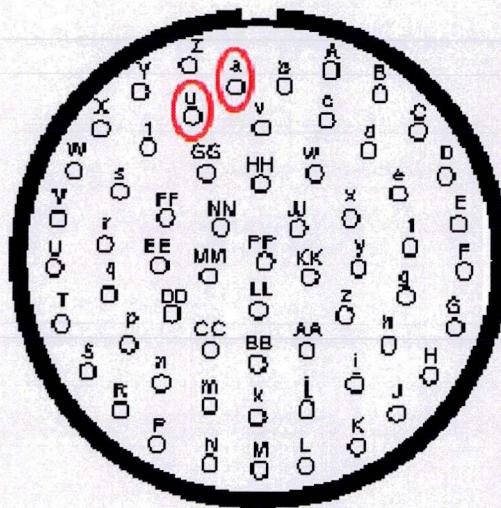


FIGURE 6: Jack Pin Locations

(Note: pin "u" & "a" locations may vary depending on aircraft configuration)

3.8 Once the wiring has been installed per DART drawing D350-822-901 Rev. B or later approved revision, check all ground wires to confirm 0.006 OHMS or less resistance.

3.9 Reattach plug to appropriate VEMD jack and reinstall the VEMD into the aircraft (reference aircraft Maintenance Manual for instructions).

3.10 Power the VEMD and enter the VEMD maintenance page EECU data screen (reference aircraft Maintenance Manual for instructions). Confirm the ASF-M value shows "1" indicating the correct installation.

EECU DATA				FADEC DATA			
XPR	52.4	%	FAIL1A	0800	HEX	NG	TOP XXX X
XPC	13.3	%	FAIL2A	0001	HEX	NG	MTP XXX.X
TOT	18	%C	FAIL1B	0800	HEX	NG	MCP XXX.X
PO	922	%B	FAIL2B	0001	HEX	T4	XXX %C LOG OUT1
P3	0.9T	BAR	FAIL1C	0000	HEX	IAS	RUD.PEDA XXX.Y NOT USHD LOG OUT2
LOC IN	3001	HEX	FAIL2C	0000	HEX	COL.PITCH XXX.X	LOG IN FAIL1
LOC OUT	0056	HEX	MAINT	0000	HEX	P3 XXXXX HEX	FAIL2 XXXX HEX
LOC ST	2401	HEX				FF XXX HEX	
LOC ID	6502	HEX				BV/HSPD/IAS P2 H/D/ASF M	X/X/X BOOLEAN
BV/ASF P/ASF M			I/O/I		Boolean	X/X/X	BOOLEAN
CONFIRMED				CONFIRMED			
EXIT --> PRESS RESET				EXIT --> PRESS RESET			

VEMD P/N B35000XX01 Shown

VEMD P/N B35000XX03 Shown

FIGURE 7: VEMD EECU Data Screen
(Note: The Data Screen may vary depending on aircraft configuration)

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	MFG. APPR.	N/A	DSI 9808	SHEET 4 OF 5	
	APPROVED	VS	TITLE	SCALE	
	DE APPR.	DS#	PA100 VEMD CONFIG	NTS	
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 3.11 For VEMD p/n B35000XX03, if the ASF-M value does not show "1" or the EECU data screen is shown instead of the FADEC data screen (see Figure 7), the installer may only need to ground pin "u" instead of pins "u" and "a" per D350-822-901 Rev.B or later approved revision.

3.12 Complete the installation of the D350-822-011 PA100 PUREair System per DART Installation Instructions IIN-D350-822 Rev. I, or later approved revision.

4.0 WEIGHT AND BALANCE

This DSI has no effect on Weight & Balance.

5.0 PARTS LIST

There are no additional parts associated with this DSI.

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	CHECKED	MB	DRAWING NO.	REV. C	
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